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10/071,836	02/08/2002	Tetsuya Toyoda	OOCL-83 (20020P501)	1369

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EXAMINER	
HERNANDEZ, NELSON D	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/071,836	TOYODA ET AL.	
	Examiner	Art Unit	
	Nelson D. Hernandez	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21 and 48-64* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21 and 48-64* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 June 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Examiner acknowledges the amended claims filed on June 7, 2007. **Claims 1-5, 7-14, 17, 20 and 21** have been amended. **Claims 22-47** have been canceled.

Response to Arguments

2. Applicant's arguments with respect to **independent claims 1-5, 7-14, 17, 20 and 21** have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 7-11, 13-21 and 48-52, 54-58 and 60-64 rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa, US Patent 6,850,271 B1 in view of Inuiya, Us Patent 6,597,468 B1.

Regarding claim 1, Ichikawa discloses an electronic camera (See fig. 3), comprising: an image capturing unit (Fig. 3: 10) capturing an image of a subject, and outputting an image signal; an image processing unit (See image processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3) obtaining image data in a

predetermined format based on the image signal captured by said image capturing unit; a setting unit (Fig. 3: 84) setting an image capturing condition for capturing the image of the subject; a storing unit (a storing unit storing a plurality of pieces of image forming instruction information unit is taught by Ichikawa by teaching that the digital camera may selectively set printer information in the smart media of the digital camera; col. 8, lines 6-9; also the memory 30 is storing photographing information and printer instructions as shown in figs. 2A and 2B) storing a plurality of pieces of image forming instruction information used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the image data; a selecting unit (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera) selecting a predetermined piece of image forming instruction information from among the plurality of pieces of image forming instruction information stored in said storing unit, based on the image capturing condition set by said setting unit, the image capturing condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line

66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)); and an outputting unit (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) associating the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose said selecting unit automatically selecting said predetermined piece of image forming instruction information, based on the image capturing condition set by said setting unit.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up

device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated

so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by having the selecting unit automatically selecting said predetermined piece of image forming instruction information, based on the image capturing condition set by said setting unit. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 2, Ichikawa discloses an electronic camera (See fig. 3), comprising: an image capturing unit (Fig. 3: 10) capturing an image of a subject, and

outputting an image signal; an image processing unit (See image processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3) obtaining image data in a predetermined format based on the image signal captured by said image capturing unit; a shooting mode selecting unit (Fig. 3: 84) selecting a mode used for shooting from among a plurality of shooting modes; a storing unit (a storing unit storing a plurality of pieces of image forming instruction information unit is taught by Ichikawa by teaching that the digital camera may selectively set printer information in the smart media of the digital camera; col. 8, lines 6-9; also the memory 30 is storing photographing information and printer instructions as shown in figs. 2A and 2B) storing a plurality of image forming instruction modes used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the image data; an image forming instruction mode selecting unit (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera) selecting a predetermined image forming instruction mode from among the plurality of image forming instruction modes stored in said storing unit based on the shooting mode selected by said shooting mode selecting unit, the shooting mode being the shooting mode under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in

consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)); and an outputting unit (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) associating the image forming instruction mode selected by said image forming instruction mode selecting unit with the image data, and outputting the selected image forming instruction mode in association with the image data (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose said selecting unit automatically selecting said predetermined image forming instruction information, based on the shooting mode selected by said shooting mode selecting unit.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically

includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by having the selecting unit automatically selecting said predetermined piece of image forming instruction information, based on the shooting mode selected by said shooting mode selecting unit. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 3, Ichikawa discloses an electronic camera (See fig. 3), comprising: an image capturing unit (Fig. 3: 10) capturing an image of a subject, and outputting an image signal; an image processing unit (See image processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3) obtaining image data in a predetermined format based on the image signal captured by said image capturing unit; an image capturing condition setting unit (Fig. 3: 84 with cursor 82) setting a condition for image capturing performed by said image capturing unit based on status of the subject; a storing unit (a storing unit storing a plurality of pieces of image forming instruction information unit is taught by Ichikawa by teaching that the digital camera may selectively set printer information in the smart media of the digital camera; col. 8, lines 6-9; also the memory 30 is storing photographing information and printer instructions as shown in figs. 2A and 2B) storing a plurality of image forming instruction modes used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the image data; an image forming instruction mode selecting unit (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera) selecting a predetermined image forming instruction mode from among the plurality of image forming instruction modes stored in said storing unit based on the condition for image capturing, which is set by said image capturing condition setting unit, the image capturing condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by

teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)); and an outputting unit (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) associating the image forming instruction mode selected by said image forming instruction mode selecting unit with the image data, and outputting the selected image forming instruction mode in association with the image data (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose said selecting unit automatically selecting said predetermined piece of image forming instruction information, based on said condition for the captured image.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the

image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by having the selecting unit automatically selecting a predetermined image forming instruction mode based on the condition for the captured image. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file,

the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 4, Ichikawa discloses an electronic camera (See fig. 3), comprising: an image capturing unit (Fig. 3: 10) capturing an image of a subject, and outputting an image signal; an image processing unit (See image processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3) obtaining image data in a predetermined format based on the image signal captured by said image capturing unit; a shooting mode selecting unit (Fig. 3: 84) selecting a mode used for shooting from among a plurality of shooting modes; an image capturing condition setting unit (Fig. 3: 84 with cursor 82) setting a condition for image capturing performed by said image capturing unit based on status of the subject; a storing unit (a storing unit storing a plurality of pieces of image forming instruction information unit is taught by Ichikawa by teaching that the digital camera may selectively set printer information in the smart media of the digital camera; col. 8, lines 6-9; also the memory 30 is storing photographing information and printer instructions as shown in figs. 2A and 2B) storing a plurality of image forming instruction modes used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the image data; an image forming instruction mode selecting unit (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera) selecting a predetermined image forming instruction mode from among the

plurality of image forming instruction modes stored in said storing unit based on the shooting mode selected by said shooting mode selecting unit, the image capturing condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)); and the condition for image capturing, which is set by said image capturing condition setting unit; and an outputting unit (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and

outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) associating the image forming instruction mode selected by said image forming instruction mode selecting unit with the image data, and outputting the selected image forming instruction mode in association with the image data (Col. 3, lines 49-65; col. 4, lines 13-67; col. 7, lines 22-35).

Ichikawa does not explicitly disclose said image forming instruction mode selecting unit automatically selecting said predetermined image forming instruction mode, based on said shooting mode selected by said shooting mode selecting unit.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different

sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by having the image forming instruction mode selecting

unit automatically selecting said predetermined image forming instruction mode, based on said shooting mode selected by said shooting mode selecting unit. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 7, Ichikawa discloses an electronic camera system (See fig. 1) having an electronic camera (Figs. 1: 50 and 3: 50), and an image forming apparatus (Fig. 1: 100), wherein: the electronic camera comprises an image capturing unit (Fig. 3: 10) capturing an image of a subject, and outputting an image signal, an image processing unit (See image processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3) obtaining image data in a predetermined format based on the image signal captured by said image capturing unit, a setting unit (Fig. 3: 84) setting an image capturing condition for capturing the image of the subject, a storing unit (a storing unit storing a plurality of pieces of image forming instruction information unit is taught by Ichikawa by teaching that the digital camera may selectively set printer information in the smart media of the digital camera; col. 8, lines 6-9; also the memory 30 is storing photographing information and printer instructions as shown in figs. 2A and 2B) storing a plurality of pieces of image forming instruction information used when an image

forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the image data, a selecting unit (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera) selecting a predetermined piece of image forming instruction information from among the plurality of pieces of image forming instruction information stored in said storing unit, based on the image capturing condition set by said setting unit, the image capturing condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)) and an outputting unit (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col.

8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) associating the image forming instruction information selected by said selecting unit with the image data, and outputting the selected image forming instruction information in association with the image data; and the image forming apparatus comprises a reading unit (Col. 3, lines 13-48) reading image data to be formed as an image, and the selected image forming instruction information in association with the image data, an image forming mode selecting unit (Fig. 1: 58) selecting an image forming mode, which corresponds to the image forming instruction information read by said reading unit, from among a plurality of image forming modes performing an image forming process according to a different condition, an image forming processing unit (Fig. 1: 62) performing an image quality forming process according to the image forming mode selected by said image forming mode selecting unit, and an image outputting unit (Fig. 1: 66) outputting image data for which an image process is performed by said image forming processing unit (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the selecting unit automatically selects said predetermined piece of image forming instruction information, based on the image capturing condition set by said setting unit.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically

includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by having the selecting unit automatically selects said predetermined piece of image forming instruction information, based on the image capturing condition set by said setting unit. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 8, Ichikawa discloses a method associating predetermined information with image data, and outputting the predetermined information in association with the image data, comprising: setting an image capturing condition for capturing an image of a subject (Using Mode dial 84 as shown in fig, 3); capturing the image of the subject, and outputting an image signal (Using photographing device 10 as shown in fig. 3); obtaining image data in a predetermined format based on the image signal (Using processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3); selecting a predetermined piece of image forming instruction information from among a plurality of pieces of image forming instruction information used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the obtained image data, according to the set image capturing condition, the image capturing condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual

mode performed image correction based on the photographing conditions)) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera); and associating the selected image forming instruction information with the obtained image data (See figs. 2A and 2B), and outputting the selected image forming instruction information in association with the image data (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the selecting of said predetermined piece of image forming instruction information, according to the set image capturing condition under the subject was captured is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a

mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer

20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by automatically selecting said predetermined piece of image forming instruction information, according to the set image capturing condition under the subject was captured is performed. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 9, Ichikawa discloses a method associating predetermined information with image data, and outputting the predetermined information in associating with the image data, comprising: selecting a mode (Using Mode dial 84 as

shown in fig, 3) used for shooting from among a plurality of shooting modes; capturing an image of a subject, and outputting an image signal (Using photographing device 10 as shown in fig. 3); obtaining image data in a predetermined format based on the image signal (Using processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3); selecting a predetermined image forming instruction mode from among a plurality of image forming instruction modes used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the obtained image data, according to the selected shooting mode, the image shooting mode being the shooting mode under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction (shooting mode, i.e. manual and automatic correction) by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting mode is affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the shooting mode being the shooting mode under which the subject was captured (since the user in the manual mode performed image correction based on the shooting mode)) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera); and

associating the selected image forming instruction mode with the obtained image data (See figs. 2A and 2B), and outputting the selected image forming instruction mode in associating with the image data (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the selecting of said predetermined image forming instruction mode, according to the selected shooting mode is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action

imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more,

Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by automatically selecting said predetermined piece of image forming instruction information, according to the selected shooting mode. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 10, Ichikawa discloses a method associating predetermined information with image data, and outputting the predetermined information in association with the image data, comprising: setting a condition for image capturing based on status of a subject (Using Mode dial 84 as shown in fig, 3); capturing an image of the subject, and outputting an image signal; (Using photographing device 10 as shown in fig. 3); obtaining image data in a predetermined format based on the image signal (Using processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3);

selecting a predetermined image forming instruction mode from among a plurality of image forming instruction modes used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the obtained image data, according to the set condition for image capturing, the set condition for image capturing being the set condition for image capturing under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera); and associating the selected image forming instruction mode with the obtained image data (See figs. 2A and 2B), and outputting the selected image forming instruction mode in association with the image data (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing

information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the selecting of said predetermined image forming instruction mode, according to the set condition for image capturing, is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible

image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by automatically selecting said predetermined image forming instruction mode, according to the set condition for image capturing. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 11, Ichikawa discloses a method associating predetermined information with image data, and outputting the predetermined information in association with the image data, comprising: selecting a mode used for shooting from among a plurality of shooting modes (Using Mode dial 84 as shown in fig, 3); setting a condition for image capturing based on status of a subject (Using Mode dial 84 with cursor 82 as shown in fig, 3); capturing an image of the subject, and outputting an image signal (Using photographing device 10 as shown in fig. 3); obtaining image data in a predetermined format based on the image signal (Using processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3); selecting a predetermined image forming instruction mode from among a plurality of image forming instruction modes used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image

based on the obtained image data, according to the selected shooting mode and the set condition for image capturing, the set condition for image capturing being the set condition for image capturing under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera); and associating the selected image forming instruction mode with the obtained image data (See figs. 2A and 2B), and outputting the image forming instruction mode in associating with the image data (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing

information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the selecting of said predetermined piece of image forming instruction information, according to the selected shooting mode and the set condition for image capturing, is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag

information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Ichikawa by automatically selecting said predetermined piece of image forming instruction information, according to the selected shooting mode and the set condition for image capturing. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 13, Ichikawa discloses an image forming method, comprising: setting an image capturing condition for capturing an image of a subject (Using Mode dial 84 as shown in fig, 3), capturing the image of the subject, and outputting an image signal (Using photographing device 10 as shown in fig. 3), obtaining image data in a predetermined format based on the image signal (Using processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3), selecting a predetermined piece of image forming instruction information from among a plurality of pieces of image forming instruction information used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the obtained image data, according to the set image capturing condition, the image capturing condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image

correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera), and associating the selected image forming instruction information with the obtained image data (See figs. 2A and 2B), and outputting the selected image forming instruction information in associating with the image data (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data

so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)), in an electronic camera (Fig. 3: 10); and reading image data to be formed as an image (Col. 3, lines 13-48), and the selected image forming instruction information in associating with the image data (Using LUT Correction shown in fig. 1: 58), selecting an image forming mode which corresponds to the read image forming instruction information from among a plurality of image forming modes performing an image forming process according to a different condition, performing an image quality forming process according to the selected image forming mode (Using Image Analyzing and Printer Auto Setup Coefficient Determining Section as shown in fig. 1: 62), and outputting the image data for which the image process is performed as the image quality forming process, in an image forming apparatus (Using Print Engine as shown in fig. 1: 66) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the selecting of said predetermined piece of image forming instruction information, according to the set image capturing condition is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines

29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting

conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by automatically selecting said predetermined piece of image forming instruction information, according to the set image capturing condition. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 14, Ichikawa discloses an electronic camera (See fig. 3), comprising: an image capturing unit (Fig. 3: 10) capturing an image of a subject, and outputting an image signal; an image processing unit (See image processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3) obtaining image data in a predetermined format based on the image signal captured by said image capturing unit; a shooting condition correcting unit (See figs. 3, processing circuits 12, 18, 20,22, 24 and 26) correcting a shooting condition for exposure; a setting unit (dial 84 with cursor 82 as shown in fig. 3) setting correction instruction information for instructing a

correction for a process performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image from the image data, based on the shooting condition corrected by said shooting condition correcting unit, the shooting condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera); and an outputting unit (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit

(memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) associating the set correction instruction information for instructing a correction for a process performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image (See figs. 2A and 2B), which is set by said setting unit, with the image data and outputting the correction instruction information in association with the image data (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the setting of said correction instruction information, based on the shooting condition, is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible

image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by automatically setting of said correction instruction information, based on the shooting condition. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 15, claim 15 is written as a Markush type claim by using the expression "... includes at least any of a grayscale process, a color process, and a sharpness process" (see lines 5-7), meeting one species of a genus family anticipates the claimed subject matter. "A generic claim cannot be allowed to an applicant if the prior art discloses a species falling within the claimed genus." The species in that case will anticipate the genus. In re Slayter, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); In re Gosteli, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989).

Ichikawa discloses that the setting unit sets correction instruction information for instructing whether or not to make a correction for each process that includes a color process, and a sharpness process (See figs. 2A and 2B), which are performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image from the

image data, based on the shooting condition corrected by said shooting condition correcting unit (Using dial 84 and the cursor 82, it can be determine whether to enable or disable a predetermined process; col. 5, lines 16-45).

Regarding claim 16, Ichikawa discloses that the setting unit sets correction instruction information for instructing corrections for a plurality of combined processes performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image from the image data, based on the shooting condition corrected by said shooting condition correcting unit (See instruction information in figs. 2A and 2B; col. 3, lines 49-65).

Regarding claim 17, Ichikawa discloses an electronic camera (See fig. 3) system having an electronic camera and an image forming apparatus (See fig. 1: 100), wherein: the electronic camera comprises an image capturing unit (Fig. 3: 10) capturing an image of a subject, and outputting an image signal, an image processing unit (processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3) obtaining image data in a predetermined format based on the image signal captured by said image capturing unit, a shooting condition correcting unit (See figs. 3, processing circuits 12, 18, 20,22, 24 and 26) correcting a shooting condition for exposure or image quality at the time of shooting, a setting unit (mode dial 84 with cursor 82 as shown in fig. 3) setting correction instruction information for instructing a correction for a process performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image from the image data, based on the shooting condition corrected by said shooting condition correcting unit, the image shooting condition being the shooting

condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction (shooting condition, i.e. manual and automatic correction) by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting mode is affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the shooting mode being the shooting mode under which the subject was captured (since the user in the manual mode performed image correction based on the shooting conditions)) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera), and an outputting unit (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data

so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) associating the set correction instruction information for instructing a correction for a process performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image, which is set by said setting unit, with the image data and outputting the correction instruction information in association with the image data (See figs. 2A and 2B); and the image forming apparatus comprises a reading unit (Col. 3, lines 13-48) reading image data to be formed as an image, and the set correction instruction information in association with the image data, an image forming processing unit (Figs. 1: 58 and 1: 62) performing an image quality forming process based on the correction instruction information read by said reading unit, and an outputting unit (Fig. 1: 66) outputting the image data for which the image process is performed by said image forming processing unit (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the setting unit automatically sets said correction instruction information, based on the shooting condition corrected, is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action

imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more,

Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by having the setting unit automatically setting said correction instruction information, based on the shooting condition corrected, is performed automatically. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 18, limitations can be found in claim 15.

Regarding claim 19, limitations can be found in claim 16.

Regarding claim 20, Ichikawa discloses a method associating predetermined information with image data, and outputting the predetermined information in association with the image data, comprising: correcting a shooting condition for exposure or image quality at the time of shooting (Using processing circuits 12, 18,

20,22, 24 and 26 as shown in fig. 3); capturing an image of a subject, and outputting an image signal (Using photographing device 10 as shown in fig. 3); obtaining image data in a predetermined format based on the image signal (Using processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3); setting correction instruction information for instructing a correction for a process performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image from the obtained image data, based on the corrected shooting condition, the image shooting condition being the shooting condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction (shooting condition, i.e. manual and automatic correction) by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting mode is affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the shooting mode being the shooting mode under which the subject was captured (since the user in the manual mode performed image correction based on the shooting conditions)) (Using mode dial 84 with cursor 82 as shown in fig. 3); and associating the set correction instruction information for instructing the correction for the process performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image with the image

data (See figs. 2A and 2B) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera), and outputting the set correction instruction information in association with the image data (by teaching that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the setting of said correction instruction information, based on the corrected shooting condition, is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action

imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more,

Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by automatically setting of said correction instruction information, based on the corrected shooting condition. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 21, Ichikawa discloses an image forming method, comprising: correcting a shooting condition for exposure or image quality at the time of shooting (Using processing circuits 12, 18, 20, 22, 24 and 26 as shown in fig. 3), capturing an image of a subject, and outputting an image signal (Using photographing device 10 as shown in fig. 3), obtaining image data in a predetermined format based on the image signal (Using processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3), setting correction instruction information for instructing a correction for a process

performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image from the obtained image data, based on the corrected shooting condition, the image shooting condition being the shooting condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction (shooting condition, i.e. manual and automatic correction) by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting mode is affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the shooting mode being the shooting mode under which the subject was captured (since the user in the manual mode performed image correction based on the shooting conditions)) (Using mode dial 84 with cursor 82 as shown in fig. 3), and associating the set correction instruction information for instructing the correction for the process performed when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image with the image data (See figs. 2A and 2B) (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera), and outputting the correction instruction information in association with the image data, in an electronic camera (by teaching that the memory unit 30 or wireless

communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the set image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)); and reading image data to be formed as an image, and the set correction instruction information in association with the image data (Col. 3, lines 13-48), performing an image quality forming process based on the read correction instruction information (Using LUT Correction 58 and Image Analyzing and Printer Auto Setup Coefficient Determining Section 62 as shown in fig. 1: 58), and outputting the image data for which the image process is performed as the image quality forming process, in an image forming apparatus (Using Print Engine as shown in fig. 1: 66) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35).

Ichikawa does not explicitly disclose that the setting of said correction instruction information, based on the corrected shooting condition, is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a

plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture

mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by automatically setting of said correction instruction information, based on the corrected shooting condition. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

Regarding claim 48, limitations have been discussed and analyzed in claim 1.

Regarding claims 49-52, 54-58 and 60-64, Ichikawa discloses that the image forming apparatus is a printer (See fig. 1: 100; col. 3, lines 14-47).

5. Claims 5, 6, 12, 53 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa, US Patent 6,850,271 B1 in view of Inuiya, Us Patent 6,597,468 B1 and further in view of Yamagishi, US Patent 6,965,410 B1.

Regarding claim 5, Ichikawa discloses an electronic camera (See fig. 3), comprising: an image capturing unit (Fig. 3: 10) capturing an image of a subject, and outputting an image signal; an image processing unit (See image processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3) obtaining image data in a predetermined format based on the image signal captured by said image capturing unit; a setting unit (Fig. 3: 84) setting an image capturing condition for capturing the image of the subject from among a plurality of image capturing conditions; a storing unit (a storing unit storing a plurality of pieces of image forming instruction information unit is taught by Ichikawa by teaching that the digital camera may selectively set printer information in the smart media of the digital camera; col. 8, lines 6-9; also the memory 30 is storing photographing information and printer instructions as shown in figs. 2A and 2B) storing a plurality of pieces of image forming instruction information used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the image data; a selecting unit (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera) selecting a predetermined piece of image forming instruction information from among the plurality of pieces of image forming instruction information stored in said storing unit; and an outputting unit (by teaching that the memory unit 30 or wireless communication unit 42

(output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) associating the image forming instruction information selected by said selecting unit with the image data (See figs. 2A and 2B), and outputting the selected image forming instruction information in association with the image data (Using memory card 30 or wireless communication unit 42; see also figs. 2A and 2B storing image data with image forming information) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35). Ichikawa also discloses that the image capturing condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26)

so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)).

Ichikawa does not explicitly disclose that said selecting unit automatically selects said predetermined piece of image forming instruction information based on said image capturing condition set.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the

images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by having said selecting unit automatically selects said predetermined piece of image forming instruction information based on said image capturing condition set. The motivation to do so would have been to provide an image

print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

The combined teaching of Ichikawa in view of Inuiya fails to teach that priorities are assigned to the image capturing conditions and selecting the pieces of information based on a priority assigned to the image capturing condition set by said setting unit.

However, Yamagishi teaches a camera (See fig. 1), which performs different processes (i.e. auto-focus, auto-exposure, flash light control, continuous shot, shutter speed, etc.) for different image capture conditions (AV, TV mode, panorama, continuous shot mode, etc.), wherein a selected shooting mode has a predetermined priority different from the conditions for image capturing (i.e. when performing continuous shot mode, the other processes such as auto exposure will be performed based on said selected mode) (Col. 3, lines 16-48; col. 5, line 65 – col. 6, line 14; col. 6, line 43 – col. 7, line 9; col. 10, lines 25-59; col. 11, lines 49-62).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya and further in view of Yamagishi as a whole, it would have been obvious to one of ordinary skill in the art a the time the invention was made to modify Ichikawa and Inuiya by assigning priorities to the image capturing conditions and selecting the pieces of information

based on a priority assigned to the image capturing condition set by said setting unit. The motivation to do so would have been to correctly process the image data captured by the camera since the image processing is performed based on the shooting mode being selected; this would also speed up the process of capturing and processing image.

Regarding claim 6, limitations can be found in claim 5.

Regarding claim 12, Ichikawa discloses a method associating predetermined information with image data, and outputting the predetermined information in association with the image data, comprising: setting an image capturing condition for capturing an image of a subject from among a plurality of image capturing conditions (Using dial shown in fig. 3: 84); capturing the image of the subject, and outputting an image signal (Using photographic device shown in fig. 3: 10); obtaining image data in a predetermined format based on the image signal (Using image processing circuits 12, 14, 16, 18, 20, 22, 24 and 26 as shown in fig. 3); selecting a predetermined piece of image forming instruction information from among a plurality of pieces of image forming instruction information used when an image forming apparatus (printer as shown in fig. 1: 100) forms a visible image based on the obtained image data (using setting unit as shown in fig. 3: 84; in col. 8, lines 6-9, Ichikawa discloses that the camera may also set the printer information. So the selection of printing instruction information can be selected on the camera); and associating the selected image forming instruction information with the obtained image data (See figs. 2A and 2B), and outputting the image forming instruction information in associating with the image data (by teaching

that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A an 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9). Also by teaching that the printing information can be selected in the camera, Ichikawa discloses that the outputting unit (memory 30 or wireless communication unit 42) associates the image forming instruction information selected by said selecting unit with the image data, and outputting the selected image forming instruction information in association with the image data so that the correction of image information at the printer can be ultimately eliminated (col. 7, lines 21-52; col. 8, lines 6-9)) (Col. 3, lines 49-65; col. 4, lines 13-67; col.7, lines 22-35). Ichikawa also discloses that the image capturing condition being the image capturing condition under which the subject was captured (Ichikawa discloses that the user is able to turn off said re-learning mode so that said user can perform manually image correction (by teaching performing manual image correction by using the LCD of the camera (Col. 7, lines 36-52), Ichikawa inherently teaches performing said correction based on the shooting conditions under which the subject was captured since the user takes in consideration how the shooting conditions are affecting the image being reviewed at the LCD). Ichikawa also teaches that the printer reads whether correction has been performed in the camera (Col. 3, line 66 – col. 4, line 12; col. 6, lines 16-26) so that the data recorded in the regions 63B1-63B5 is the printing information based on the image capturing condition being the image capturing condition under which the subject was captured (since the user in the manual mode performed image correction based on the photographing conditions)).

Ichikawa does not explicitly disclose that said selecting of said predetermined piece of image forming instruction information based on said image capturing condition set, is performed automatically.

However, Inuiya discloses an electronic camera (Fig. 2: 22), comprising: an image capturing unit (col. 4, lines 46-64; see also fig. 4B, suggesting the image pick up device being a CCD) capturing an image of a subject, and outputting an image signal; a mode selection switch to select different modes such as wide dynamic range (where a plurality of images are captured with different exposure values), panoramic imaging (a plurality of images are captured to create a large image of a scene), stroboscopic action imaging (a plurality of sequential images captured of an object in motion) (Col. 8, lines 29-40). Inuiya also discloses that when one of said modes is selected the images captured are stored in a storing unit (Fig. 2: 24) storing a plurality of pieces of image forming instruction information used when an image forming apparatus forms a visible image based on the image data (For instance, in the dynamic range mode the camera automatically includes additional information (See figs. 3: 28 and 5: 28) as a tag information such as an indicating that two images were captured using different sensitivities and information identifying the two images so that the image reproducing system (image processor in conjunction with printer 20 as shown in fig. 1) processes the images to produce an image with higher dynamic range (Col. 5, lines 12-53); in the panoramic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a plurality of images were captured, information indicating the frames that belong to the panoramic image and the

image sequence to be used by an image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1) to produce the desired panoramic image (Col. 6, line 57 – col. 7, line 12); in the stroboscopic mode, the camera automatically includes additional information as a tag information as a tag information such as an indicating that a sequence of images have been captured and that they are associated so that the image reproducing system (image processor 18 in conjunction with printer 20 as shown in fig. 1). This teaches that based on a selection of a shooting or picture mode selected by the user prior to capture the image with the camera, said camera selects a predetermined piece of image forming instruction information). Further more, Inuiya also discloses storing in the tag area information related to different shooting conditions such as LV value, EV value, shutter speed, F value, color temperature, strobe information, date, etc. (Col. 3, lines 15-47; col. 4, line 9 – col. 7, line 40; col. 8, lines 29-40).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ichikawa by automatically selecting said predetermined piece of image forming instruction information based on said image capturing condition set. The motivation to do so would have been to provide an image print system, which can produce a high-quality photograph print from an image file having additional information, using various types of image data and the additional information as suggested by Inuiya (Col. 9, lines 42-52). It would also minimize the amount of operations performed by the user since by including the additional information in the file, the user would not need to

identify or remember the shooting conditions when the image or images were captured to reproduce the image data, thus providing a more user friendly image print system.

The combined teaching of Ichikawa in view of Inuiya fails to teach that priorities are assigned to the image capturing conditions and selecting the pieces of information based on a priority assigned to the image capturing condition set by said setting unit.

However, Yamagishi teaches a camera (See fig. 1), which performs different processes (i.e. auto-focus, auto-exposure, flash light control, continuous shot, shutter speed, etc.) for different image capture conditions (AV, TV mode, panorama, continuous shot mode, etc.), wherein a selected shooting mode has a predetermined priority different from the conditions for image capturing (i.e. when performing continuous shot mode, the other processes such as auto exposure will be performed based on said selected mode) (Col. 3, lines 16-48; col. 5, line 65 – col. 6, line 14; col. 6, line 43 – col. 7, line 9; col. 10, lines 25-59; col. 11, lines 49-62).

Therefore, taking the combined teaching of Ichikawa in view of Inuiya and further in view of Yamagishi as a whole, it would have been obvious to one of ordinary skill in the art a the time the invention was made to modify Ichikawa and Inuiya by assigning priorities to the image capturing conditions and selecting the pieces of information based on a priority assigned to the image capturing condition set by said setting unit. The motivation to do so would have been to correctly process the image data captured by the camera since the image processing is performed based on the shooting mode being selected; this would also speed up the process of capturing and processing image.

Regarding claims 53 and 59, Ichikawa discloses that the image forming apparatus is a printer (See fig. 1: 100; col. 3, lines 14-47).

Conclusion

6. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

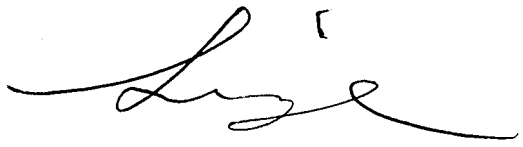
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 9:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nelson D. Hernandez
Examiner
Art Unit 2622

NDHH
August 9, 2007



LIN YE
SUPERVISORY PATENT EXAMINER